[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 28651 5/24/2001]

[Docket No. 2001-NM-86-AD; Amendment 39-12237; AD 2001-10-11]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model MD-90-30 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain McDonnell Douglas Model MD-90-30 series airplanes. This action requires an inspection of the wiring of the primary and alternate static port heaters for chafing, loose connections, and evidence of arcing, and to determine what type of insulation blanket is installed in the area of the static port heaters; and corrective actions, if necessary. This action is necessary to ensure that insulation blankets constructed of metallized Mylar™ are removed or protected from the area of the static port heater. Such insulation blankets could propagate a small fire that is the result of an electrical short of the static port heater and could lead to a much larger fire and smoke in the cabin. This action is intended to address the identified unsafe condition.

DATES: Effective June 8, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 8, 2001.

Comments for inclusion in the Rules Docket must be received on or before July 23, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-86-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2001-NM-86-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in this AD may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024). This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Elvin Wheeler, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5344; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: As part of its practice of re-examining all aspects of the service experience of a particular aircraft whenever an accident occurs, the FAA has become aware of an incident of smoke in the cabin on a McDonnell Douglas Model MD-88 airplane. An investigation discovered evidence of a fire adjacent to the right-side alternate static port heater. It was discovered that the wiring of the static port heater had shorted, which caused an ignition source for the metallized Mylar™ (i.e., polyethyleneteraphthalate) insulation blanket directly inboard of the heater element. Insulation blankets constructed of metallized Mylar™ in the area of the static port heater, if not corrected, could propagate a small fire that is the result of an electrical short of the static port heater and could lead to a much larger fire and smoke in the cabin.

The static port heater on McDonnell Douglas Model MD-90-30 series airplanes and Model DC-9-81, -82, -83, and -87 series airplanes are identical to those on the affected Model MD-88 airplane. Therefore, all of these models are subject to the same unsafe condition.

Other Related Rulemaking

The FAA is planning to address the identified unsafe condition of McDonnell Douglas Model DC-9-81, -82, -83, and -87 series airplanes, and Model MD-88 airplanes in a separate rulemaking action.

The FAA, in conjunction with Boeing and operators of McDonnell Douglas Model MD-90-30 series airplanes, is continuing to review all aspects of the service history of those airplanes to identify potential unsafe conditions and to take appropriate corrective actions. This airworthiness directive (AD) is one of a series of actions identified during that process. The process is continuing and the FAA may consider additional rulemaking actions as further results of the review become available.

The FAA has previously issued AD 2000-11-01, amendment 39-11749 (65 FR 34322, May 26, 2000), that address insulation blankets made from metallized polyethyleneteraphthalate (MPET) on certain McDonnell Douglas Model DC-9-80 and MD-90-30 series airplanes, and Model MD-88 airplanes. However, this AD does NOT terminate or otherwise amend the requirements of AD 2000-11-01.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin MD90-30A023, including Appendix, dated March 14, 2001, which describes procedures for a visual inspection of the wiring of the primary and alternate port heaters for chafing, loose connections, and evidence of arcing, and to determine what type of insulation blanket is installed in the area of the static port heaters; and corrective actions, if necessary. The corrective actions include:

1. Repairing or replacing wiring with new wiring, if necessary; and
2. Replacing any metallized Mylar™ insulation blanket with a metallized Tedlar™ insulation blanket by using the removed blanket as a pattern, or applying a Douglas material specification (DMS) 1984 tape patch to the outboard side of the metallized Mylar™ insulation blanket in the area adjacent to the primary and alternate static ports and reidentifying the modified blankets.

Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other McDonnell Douglas Model MD-90-30 series airplanes of the same type design, this AD is being issued to ensure that insulation blankets constructed of metallized Mylar™ are removed or protected from the area of the static port heater. Such insulation blankets could propagate a small fire that is the result of an electrical short of the static port heater and could lead to a much larger fire and smoke in the cabin. This AD requires accomplishment of the actions specified in the service bulletin described previously, except as discussed below.

Differences Between the Service Bulletin and the AD

Operators should note that, although the referenced service bulletin recommends accomplishing the visual inspection within 6 months (after the issue date of the service bulletin), the FAA has determined that an interval of 6 months would not address the identified unsafe condition in a timely

manner. In developing an appropriate compliance time for this AD, the FAA considered not only the manufacturer's recommendation, but the degree of urgency associated with addressing the subject unsafe condition, the average utilization of the affected fleet, and the time necessary to perform the inspection (2 hours). In light of all of these factors, the FAA finds a 3-month compliance time for completing the required actions to be warranted, in that it represents an appropriate interval of time allowable for affected airplanes to continue to operate without compromising safety.

For cases where a metallized Mylar™ insulation blanket is installed, this AD, unlike the referenced service bulletin, provides two additional options (i.e., Options 3 and 4). Option 3 removes the metallized Mylar™ insulation blanket material by cutting away the metallized film and fiberglass batting, and sealing the trimmed cutout with DMS 1984 tape, so that no fiberglass is exposed. Option 4 replaces the metallized Mylar™ insulation blanket with an insulation blanket that meets the requirements of AD 2000-11-01, or that has been approved by the Manager, Los Angeles Aircraft Certification Office (ACO), as an alternative method of compliance with the requirements of AD 2000-11-01. The FAA finds that these actions would adequately address the identified unsafe condition.

Condition 2 of the Accomplishment Instructions of the referenced service bulletin addresses metallized Tedlar™ insulation blankets that are found installed. Metallized Tedlar™ insulation blankets can be reinstalled on airplanes, because they are not subject to the identified unsafe condition of this AD. The FAA finds that in addition to metallized Tedlar™ insulation blankets, there are other non-metallized Mylar™ insulation blankets that are not subject to the identified unsafe condition of this AD. Therefore, for this AD, we have decided not to use the phrase "metallized Tedlar™ insulation blankets." For these cases, the AD will refer to insulation blankets not constructed of metallized Mylar™.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-86-AD." The postcard will be date stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-10-11 MCDONNELL DOUGLAS: Amendment 39-12237. Docket 2001-NM-86-AD.

Applicability: Model MD-90-30 series airplanes, as listed in Boeing Alert Service Bulletin MD90-30A023, including Appendix, dated March 14, 2001; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure that insulation blankets constructed of metallized Mylar™ are removed or protected from the area of the static port heater, which could propagate a small fire that is the result of an electrical short of the static port heater and could lead to a much larger fire and smoke in the cabin, accomplish the following:

Inspection

(a) Within 3 months after the effective date of this AD, do a general visual inspection of the wiring of the primary and alternate port heaters for chafing, loose connections, and evidence of arcing, and to determine what type of insulation blanket is installed in the area of the static port heaters, per Boeing Alert Service Bulletin MD90-30A023, including Appendix, dated March 14, 2001.

Note 2: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

Note 3: Insulation blankets that are marked with "DMS 2072, Type 2, Class 1, Grade A;" "DMS 2072, Type 2, Class 1;" or "DMS 1996, Type 1;" are constructed of metallized polyethyleneteraphthalate (MPET).

Repair or Replacement for Any Chafing, Loose Connection, or Arcing

(b) If any chafing, loose connection, or arcing is detected during the inspection required by paragraph (a) of this AD, before further flight, repair or replace wiring with new wiring, per Boeing Alert Service Bulletin MD90-30A023, including Appendix, dated March 14, 2001.

No Metallized Mylarä (i.e., polyethyleneteraphthalate) Insulation Blanket(s) Installed

(c) If the insulation blankets that are installed in the area identified in paragraph (a) of this AD are not constructed of metallized Mylar™, no further action is required by this AD for those blankets.

Metallized Mylarä (i.e., polyethyleneteraphthalate) Insulation Blanket(s) Installed

(d) If any insulation blanket that is installed in the area identified in paragraph (a) of this AD is constructed of metallized Mylar™, before further flight, do the actions specified in paragraph (d)(1), (d)(2), (d)(3), or (d)(4) of this AD.

(1) Option 1. Replace the metallized Mylar™ insulation blanket with a metallized Tedlar™ insulation blanket by using the removed blanket as a pattern, per Boeing Alert Service Bulletin MD90-30A023, including Appendix, dated March 14, 2001.

(2) Option 2. Apply a Douglas material specification (DMS) 1984 tape patch to the outboard side of the metallized Mylar™ insulation blanket in the area adjacent to the primary and alternate static ports and reidentify the modified blankets, per Boeing Alert Service Bulletin MD90-30A023, including Appendix, dated March 14, 2001.

(3) Option 3. Remove the metallized Mylar™ insulation blanket material by cutting away the metallized film and fiberglass batting to match the blanket patch shown in VIEW A or B of Figure 1 of Boeing Alert Service Bulletin MD90-30A023, including Appendix, dated March 14, 2001. Seal the trimmed cutout with DMS 1984 tape, so that no fiberglass is exposed.

(4) Option 4. Replace the metallized Mylar™ insulation blanket with an insulation blanket that meets the requirements of AD 2000-11-01, amendment 39-11749, or that has been approved by the Manager, Los Angeles Aircraft Certification Office (ACO), as an alternative method of compliance with the requirements of AD 2000-11-01.

Note 4: Accomplishment of the action(s) required by paragraphs (d)(2) or (d)(3) of this AD does NOT terminate or otherwise amend the requirements of AD 2000-11-01. Operators are still required, within 5 years after June 30, 2000 (the effective date of AD 2000-11-01), to replace insulation blankets made from metallized polyethyleneteraphthalate (MPET) with new insulation blankets per AD 2000-11-01.

Compliance with Requirements of AD 2000-11-01

(e) Accomplishment of the replacement required by paragraph (d)(1) or (d)(4) of this AD is acceptable for compliance with AD 2000-11-01 for the replaced blanket only.

Alternative Methods of Compliance

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles ACO, FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(h) Except as provided by paragraphs (d)(3) and (d)(4) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin MD90-30A023, including Appendix, dated March 14, 2001. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(i) This amendment becomes effective on June 8, 2001.

FOR FURTHER INFORMATION CONTACT: Elvin Wheeler, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5344; fax (562) 627-5210.

Issued in Renton, Washington, on May 16, 2001.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.